

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

STATEMENT OF BASIS
APPLICATION FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
TO DISCHARGE TO STATE WATERS

Permittee Name: Country Life R.V and Mobile Home Park
NPDES Permit Number: CA0104264
Public Notice No.: 7-03-11
Board Order No.: R7-2003-0053

Mailing Address: Forrest Enterprise, Inc.
375 E. Ross Road
El Centro, CA 92243

Location: 375 E. Ross Road
El Centro, CA 92243

Contact Person: Richard Kennedy

Telephone: (760) 353-1040

I. Status of Permit

Forrest Enterprise, Inc., owner (hereinafter referred to as the discharger), of the Country Life R.V. and Mobile Home Park submitted an application to update its Waste Discharge Requirements and to renew its permit to discharge wastewater under the National Pollutant Discharge Elimination System (NPDES). Operation of the wastewater treatment facility is under contract with Munoz Water and Wastewater monitoring. The application is for the wastewater treatment facility located at the address mentioned above.

II. Facility Description

The facility provides treatment through an activated sludge treatment plant designed for a maximum flow of 150,000 GPD. The sewage is conveyed from the park by gravity into a lift station, then pumped to a second lift station that pumps it to the plant, where it receives secondary treatment. Wastewater pumped to the treatment works passes through a manual bar screen, into an aeration basin, then into a clarifier located in the center of the package plant. Clarified wastewater passes over V-notch weirs and into an effluent channel before entering into an effluent weir box. Sludge from the clarifier is pumped into the re-aeration phase of the package plant. Re-aerated mixed liquor either passes through a baffle and back into the primary aeration tank or is wasted into an aerobic digester. Digested sludge is wasted to two drying beds located next to the package plant. The dried sludge is removed from the bed and disposed of at a permitted solid waste disposal facility. The facility is required to have a disinfection system in operation by June 30, 2003. The facility is planning to install an ultraviolet light (UV) disinfection unit.

III. Description of Discharge

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All wastewater discharged at this facility is discharged through Outfall 001 to the Alder Drain located in the NE ¼ of Section 10, T16S, R14E, SBB&M. Alder Drain flows to the Central Drain for a distance of approximately 10 miles before entering the Alamo River at appoint approximately 38 miles from the Salton Sea. The discharge consists of secondary treated domestic wastewater.

IV. Receiving Water

The receiving water for Outfall 001 is the Alder Drain. Alder Drain flows to the Central Drain before entering the Alamo River.

1. The designated beneficial uses of waters of the Imperial Valley Drains and Alamo River are:
 - a. Fresh Water Replenishment of Salton Sea (FRSH)
 - b. Water Contact Recreation (REC I)¹
 - c. Non-Contact Water Recreation (REC II)²
 - d. Warm Water Habitat (WARM)
 - e. Wildlife Habitat (WILD)
 - f. Preservation of Rare, Threatened, or Endangered Species (RARE)³
 - g. Potential Use (Alamo River): Hydropower Generation

V. Proposed Technology-Based Effluent Limitations

Regulations promulgated in 40 CFR §125.3(a)(1) require technology-based effluent limits for municipal dischargers to be placed in NPDES permits based on Secondary Treatment Standards.

a. Secondary Treatment Standards

<u>Constituents</u>	<u>Unit</u>	<u>30-Day⁴ Arithmetic Mean Discharge Rate</u>	<u>7-Day⁵ Arithmetic Mean Discharge Rate</u>
20° C BOD ₅ ⁶	mg/L	30	45
Total Suspended Solids	mg/L	30	45

The 30-day average percent removal of the pollutant parameters BOD₅ and total suspended solids shall not be less than 85 percent.

The hydrogen ion (pH) of the effluent shall be maintained within the limits of 6.0 to 9.0.

Biochemical Oxygen Demand (BOD) Discharges to waters that support aquatic life, that is dependent on oxygen. Organic matter in the discharge may consume oxygen as it breaks down.

¹ Unauthorized Use. The only REC 1 usage that is known to occur is from infrequent fishing activity.

² Unauthorized Use.

³ Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis upon the California Department of Fish and Game on its own initiative and/or at the request of the Regional Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Board.

⁴ 30 Day Mean- Arithmetic average of all samples collected during the calendar month

⁵ 7 Day Mean- Arithmetic average of all samples collected during a calendar week (Sunday through Saturday)

⁶ Biochemical Oxygen Demand

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Total Suspended Solids (TSS)	High levels of suspended solids can adversely impact aquatic habitat. Untreated or improperly treated wastewater can contain high amounts of suspended solids.
Hydrogen Ion (pH)	Hydrogen Ion (pH) is a measure of Hydrogen Ion concentration in the water. A range specified between 6 to 9 ensures suitability of biological life. This limitation has been adopted in the Basin Plan of the Region.

VI. Proposed Water Quality-Based Effluent Limitations

Effluent discharged from this facility could contain pollutants in sufficient quantities to affect receiving water quality. Pursuant to Section 13263, Article 4, Chapter 4 of the Porter Cologne Water Quality Control Act, the Regional Boards are required to issue Waste Discharge Requirements for discharges that could affect the quality of the State's waters. Furthermore, Federal Regulation 40 CFR 122.1 requires the issuance of NPDES permits for pollutants discharged from a point source to the waters of the United States. The draft discharge requirements contain specific discharge limitations for selected pollutants.

<u>Constituents</u>	<u>Basis for Limitations</u>
Total Dissolved Solids	High levels of TDS can adversely impact aquatic life. The TDS limit is from the Basin Plan of the Region.
Toxicity	Toxicity testing ensures that the effluent does not contain metals, chemicals, pesticides or other constituents in concentrations toxic to aquatic life.
<i>Escherichia Coli</i> (E. coli)	These limits are required by the Basin Plan for waters designated for water contact recreation (RECI) or noncontact water recreation (RECII).
Chlorine Residual	This limitation is based on the USEPA's <i>Ambient Water Quality Criteria for Chlorine – 1984</i> .

The following water quality based effluent limits are based on monitoring results and using the California Toxic Rule and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (The calculations are shown in Attachment "A"):

Copper	Average Monthly Effluent Limit ⁷ (ug/L) = 2.39 Maximum Daily Effluent Limit (ug/L) = 4.80
Cyanide	Average Monthly Effluent Limit (ug/L) = 0.498 Maximum Daily Effluent Limit (ug/L) = 1.00
Mercury	Average Monthly Effluent Limit (ug/L) = 0.051 Maximum Daily Effluent Limit (ug/L) = 0.102

⁷ Compliance with the Average Monthly Effluent Limit shall be determined as described in Section 2.4.5 Compliance Determination (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California).

⁸ This Requirement applies only if the facility installs a chlorination/de-chlorination unit process.

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Selenium

Average Monthly Effluent Limit (ug/L) = 4.09
Maximum Daily Effluent Limit (ug/L) = 8.22

Wastewater effluent discharged to Alder Drain shall not have a *Escherichia coli* (*E. coli*) concentration in excess of a log mean of Most Probable Number (MPN) of 126 MPN per 100 milliliters (based on a minimum of not less than five samples for any 30-day period) nor shall any sample exceed 400 MPN per 100 milliliters. The compliance point for this effluent limitation shall be at a location acceptable to the Regional Board's Executive Officer or his designee.

Wastewater discharged to Alder Drain shall not contain a total chlorine residual greater than 0.02 mg/L as an instantaneous maximum and 0.01 mg/L as a monthly average. Compliance for this effluent limitation shall be at end of pipe prior to discharge into Alder Drain.⁸

There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Board.

<u>Constituent</u>	<u>Unit</u>	<u>30-Day Arithmetic Mean Discharge Rate</u>	<u>7-Day Arithmetic Mean Discharge Rate</u>
Total Dissolved Solids	mg/L	2,000	2,500

VII. Proposed Effluent Limitations

Table 1, contained later in this Statement of Basis, summarizes the proposed effluent limitations for Outfall 001. Proposed effluent limitations are based on secondary treatment standards, California Toxics Rule, and Colorado River Basin Plan Water Quality Standards.

VIII. Monitoring Requirements

Monitoring for those pollutants expected to be present in the Outfall 001 will be required as shown on the proposed monitoring and reporting program and as required in the "*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*" adopted March 2, 2000.

IX. Information Sources

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While developing effluent limitations and receiving water limitations, monitoring requirements, and special conditions for the draft permit, the following information sources were used:

- (1) EPA NPDES Application Form 1 dated May 26, 2002 and Form 2C dated September 6, 2002.
- (2) Code of Federal Regulations – Title 40
- (3) Water Quality Control Plan (Colorado River Basin – Region 7) as amended to date.
- (4) Regional Board files related to Country Life R.V. and Mobile Home Park NPDES permit CA0104264.
- (5) Porter-Cologne Water Quality Control Act with additions and amendments effective January 1, 2000.
- (6) Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted March 2, 2000.
- (7) California Toxics Rule, published May 18, 2000 by U.S. EPA.
- (8) National Toxics Rule (NTR), adopted by U.S. EPA on February 5, 1993.

X. Written Comments

Interested parties and agencies are invited to submit written comments on the proposed Waste Discharge Requirements and the Regional Board's Executive Officer's proposed determinations. Comments should be submitted in writing not later than April 17, 2003, to:

Executive Officer
California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

The application number shall appear on the first page of any submitted comments. All comments received by the above date will be considered in the formulation of the final determinations.

XI. Public Hearing

The Waste Discharge Requirements will be considered by the Regional Board at a public hearing to be held at the City Council Chambers, City of La Quinta, 78-495 Calle Tampico, La Quinta, CA 92253 on May 7, 2003.

XII. Waste Discharge Requirements Appeals

Any person may petition the State Board to review the decision of the Regional Board regarding Waste Discharge Requirements. A petition must be made within 30 days of the Regional Board's hearing.

XIII. Additional Information

Persons wishing further information may write to the following address:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

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or call the Regional Board at (760) 346-7491.

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TABLE 1
PROPOSED EFFLUENT AND RECEIVING WATER LIMITATIONS
NPDES PERMIT NO. CA0104264
BOARD ORDER NO. R7-2003-0053
FORREST ENTERPRISE, INC., OWNER
MUNOZ WATER AND WASTEWATER MONITORING, OPERATOR
COUNTRY LIFE R.V. AND MOBILE HOME PARK
WASTEWATER TREATMENT FACILITY

EFFLUENT LIMITATIONS

1. Representative samples of wastewater discharged to the Alder Drain from the treatment systems shall not contain constituents in excess of the limits indicated below. The treatment system discharging to the Alder Drain shall be monitored at a location which is acceptable by the Regional Board's Executive Officer or his designee:

<u>Constituent</u>	<u>Unit</u>	<u>30-Day Arithmetic Mean Discharge Rate⁹</u>	<u>7-Day Arithmetic Mean Discharge Rate¹⁰</u>
20° C BOD ₅ ¹¹	mg/L ¹²	30	45
	lb/day ¹³	38	57
Total Suspended Solids	mg/L	30	45
	lb/day	38	57
Total Dissolved Solids	mg/L	2,000	2,500

2. The 30-day monthly average percent removal of the pollutant parameters BOD₅ and total suspended solids shall not be less than 85 percent.
3. The hydrogen ion (pH) of the effluent shall be maintained within the limits of 6.0 to 9.0.
4. Beginning on June 30, 2003, unless otherwise approved by the Regional Board's Executive Officer, wastewater effluent discharged to the Alder Drain shall not have a geometric mean *Escherichia coli* (E. coli) concentration in excess of 126 Most Probable Number (MPN) per 100 milliliters (based on a minimum of not less than five (5) samples for any 30-day period) nor shall any sample exceed 400 MPN per 100 milliliters. The compliance point for this effluent limitation shall be at a location acceptable to the Regional Board's Executive Officer or his designee.
5. Wastewater discharged to the Alder Drain shall not contain a total chlorine residual greater than 0.02 mg/L as an instantaneous maximum and 0.01 mg/L as a monthly average. Compliance for this effluent limitation shall be at end of pipe prior to discharge into the Alder Drain. (Note: This

⁹ 30 Day Mean- Monthly arithmetic mean sample concentration

¹⁰ 7 Day Mean- Weekly arithmetic mean samples concentration

¹¹ BOD₅ - Biochemical Oxygen Demand

¹² mg/L - milligrams per Liter

¹³ lb/day - Design Flow x 8.34 x Concentration

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requirement only applies if the facility installs a chlorination/de-chlorination unit process.)

6. There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Board.
7. Based on the Reasonable Potential Analysis, numeric Water Quality Based Effluent Limits are required for these constituents.

<u>Constituents</u>	<u>Unit</u>	<u>Average Monthly Effluent Limit</u>	<u>Maximum Daily Effluent Limit</u>
Copper	ug/L	2.39	4.80
Cyanide	ug/L	0.498	1.00
Mercury	ug/L	0.051	0.102
Selenium	ug/L	4.09	8.22

RECEIVING WATER LIMITATIONS

1. Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit. The discharge shall not cause the following in the Alder Drain:
 - a. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L. When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.
 - b. The presence of oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.
 - c. Result in the deposition of pesticides or combination of pesticides to be detected in concentrations that adversely affect beneficial uses.
 - d. Aesthetically undesirable discoloration in the receiving water.
 - e. A significant increase in fungi, slime, or other objectionable growth.
 - f. Increase turbidity that results in affecting beneficial uses.
 - g. The normal ambient pH to fall below 6.0 or exceed 9.0 units.
 - h. Impact the receiving water temperature, resulting in adversely affecting beneficial uses.
 - i. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.

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- j. The chemical constituents to exceed concentrations that adversely affect beneficial uses or create nuisance.
 - k. Toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
 - l. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause or otherwise adversely affect beneficial uses.
2. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Permit in accordance with such more stringent standards.